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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
RAO, ANAND SHASHIKANT	
ART UNIT	**PAPER NUMBER**
2621	

DATE MAILED: 07/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/764,312	YAMADA ET AL.	
	Examiner	Art Unit	
	Andy S. Rao	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 May 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2-26* is/are pending in the application.

4a) Of the above claim(s) *2-4 and 9-15* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *5,-8, 16-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Response to Arguments

1. Applicant's arguments, see the reasons for pre-appeal brief request for review, filed on 5/9/06, with respect to the rejection(s) of claim(s) 5-8 and 16-26 under 35 U.S.C 102(e) as being anticipated by Suzuki have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Hurst, Jr.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 18-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A). Claims 18-20 refer to canceled claim 1, therefore is not antecedent basis for the "predetermined processing..." limitations contained therein. Correction is required.

B). Claims 21-23, refer to "input image controller..." which fails to appear anywhere in the method claim of 16. Correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 16-17, and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Hurst, Jr. (US Patent 6,459,811 hereinafter referred to as "Hurst").

Hurst discloses an image coding method for coding a motion image signal, and outputting the coded data as a bit stream (Hurst: column 7, lines 25-30), said image coding device comprising: executing a predetermined processing of an input motion signal for reducing the amount of coded data when coding the motion image signal by a coding method (Hurst: column 7, lines 10-26) in which it is prescribed that the frame rate of a motion signal is set for to a constant level to be output at its decoding time (Hurst: column 7, lines 45-55: "frame pulse"), and outputs the processed motion image signal, together with the process information indicating the detail of processing; and r coding the motion image signal processed at said input image

controller into a data in conformity with said coding method on the basis of said process information (Hurst: column 7, lines 25-45), as in claim 16.

Hurst discloses an image coding device for coding a motion image signal, and outputting the coded data as a bit stream (Hurst: figure 3), said device comprising: an input image controller which, in the case where the motion signal is of the interlaced mode (Hurst: column 1, lines 45-55), equalizes two fields (Hurst: column 7, lines 10-26) at a predetermined rate (Hurst: column 7, lines 45-55: "frame pulse"), and outputs the processed motion image signal; and an image coder for coding the motion image signal processed at said input image controller into a data in conformity with method that is designed for outputting a motion image signal at a constant frame rate (Hurst: column 7, lines 25-45; column 3, lines 50-67), as in claim 17.

Regarding claim 24, Hurst discloses that the input image input controller executes the predetermined processing when the frame rate of the motion image signal is greater than a predetermined frame rate (Hurst: column 7, lines 45-60), as in the claim.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 5-8, and 22-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hurst, Jr., (US Patent 6,459,811 hereinafter referred to as "Hurst") in view of Suzuki et al., (US Patent 6,535,558 hereinafter referred to as "Suzuki").

Hurst discloses an image coding device for coding a motion image signal, and outputting the coded data as a bit stream (Hurst: figure 3), said image coding device comprising: an input image controller that executes a predetermined processing of an input motion signal for reducing the amount of coded data when coding the motion image signal by a coding method (Hurst: column 7, lines 10-26) in which it is prescribed that the frame rate of a motion signal is set for to a constant level to be output at its decoding time (Hurst: column 7, lines 45-55: "frame pulse"), and outputs the processed motion image signal, together with the process information indicating the detail of processing; and an image coder for coding the motion image signal processed at said input image controller into a data in conformity with said coding method on the basis of said process information (Hurst: column 7, lines 25-45); wherein said input image controller codes the input motion signal with the interlaced method (Hurst: column 1, lines 40-67), and outputs said processed motion signal with said process information for, and said image coder performs a predictive coding and generates a coded data (Hurst: column 3, lines 50-67), as in claim 5. However, Hurst fails to disclose using excluded fields as a part of the image coding method. Suzuki discloses the use of excluded image information (Suzuki: column 15, lines 5-15: "skipped macroblocks") in order to provide more efficient temporal and spatial scalability for coded images (Suzuki: column 10, lines 15-43). Accordingly, given this teaching, it would have been obvious for one of ordinary skill in the art to incorporate the Suzuki use of excluded image information into the Hurst apparatus by using the exclusion property on Hurst's disclosed

interlaced processing in order to have the Hurst apparatus provide for more efficient spatial and temporal scalability with coded image signals. The Hurst apparatus, now incorporating Suzuki's exclusion processor, has all of the features of claim 5.

Hurst discloses an image coding device for coding a motion image signal, and outputting the coded data as a bit stream (Hurst: figure 3), said image coding device comprising: an input image controller that executes a predetermined processing of an input motion signal for reducing the amount of coded data when coding the motion image signal by a coding method (Hurst: column 7, lines 10-26) in which it is prescribed that the frame rate of a motion signal is set for to a constant level to be output at its decoding time (Hurst: column 7, lines 45-55: "frame pulse"), and outputs the processed motion image signal, together with the process information indicating the detail of processing; and an image coder for coding the motion image signal processed at said input image controller into a data in conformity with said coding method on the basis of said process information (Hurst: column 7, lines 25-45); wherein said input image controller codes the input motion signal with the interlaced method (Hurst: column 1, lines 40-67), and outputs said processed motion signal with said process information for, and said image coder performs a predictive coding and generates a coded data (Hurst: column 3, lines 50-67), as in claim 5. However, Hurst fails to disclose using excluded fields as a part of the image coding method or having all motion vectors to be zero, as in claim 6-7. Suzuki discloses the use of excluded image information (Suzuki: column 15, lines 5-15: "skipped macroblocks") and further discloses the use of motion vectors set to zero (Suzuki: column 15, lines 16-25: "a zero vector value") in order to provide more efficient temporal and spatial scalability for coded images (Suzuki: column 10, lines 15-43). Accordingly, given this teaching, it would have been obvious for one of ordinary

skill in the art to incorporate the Suzuki use of excluded image information and zero vector value processing into the Hurst apparatus by using the exclusion property on Hurst's disclosed interlaced processing in order to have the Hurst apparatus provide for more efficient spatial and temporal scalability with coded image signals. The Hurst apparatus, now incorporating Suzuki's exclusion processor and zero vector value assignor, has all of the features of claim 6-7.

Hurst discloses an image coding device for coding a motion image signal, and outputting the coded data as a bit stream (Hurst: figure 3), said image coding device comprising: an input image controller that executes a predetermined processing of an input motion signal for reducing the amount of coded data when coding the motion image signal by a coding method (Hurst: column 7, lines 10-26) in which it is prescribed that the frame rate of a motion signal is set for to a constant level to be output at its decoding time (Hurst: column 7, lines 45-55: "frame pulse"), and outputs the processed motion image signal, together with the process information indicating the detail of processing; and an image coder for coding the motion image signal processed at said input image controller into a data in conformity with said coding method on the basis of said process information (Hurst: column 7, lines 25-45); wherein said input image controller codes the input motion signal with the interlaced method (Hurst: column 1, lines 40-67), and outputs said processed motion signal with said process information for, and said image coder performs a predictive coding and generates a coded data (Hurst: column 3, lines 50-67); and either the image coder observes a motion vector from two fields (Hurst: column 1, lines 50-55), namely preceding and following fields (Hurst: column 2, lines 25-45), and said image coder interpolated said determined motion vector in accordance with each of the intervals performs a predictive coding (Hurst: column 8, lines 10-20), as in claim 8. However, Hurst fails to disclose using excluded

fields as a part of the image coding method. Suzuki discloses the use of excluded image information (Suzuki: column 15, lines 5-15: "skipped macroblocks") in order to provide more efficient temporal and spatial scalability for coded images (Suzuki: column 10, lines 15-43). Accordingly, given this teaching, it would have been obvious for one of ordinary skill in the art to incorporate the Suzuki use of excluded image information into the Hurst apparatus by using the exclusion property on Hurst's disclosed interlaced processing in order to have the Hurst apparatus provide for more efficient spatial and temporal scalability with coded image signals. The Hurst apparatus, now incorporating Suzuki's exclusion processor, has all of the features of claim 8.

Hurst discloses an image coding method for coding a motion image signal, and outputting the coded data as a bit stream (Hurst: column 7, lines 25-30), said image coding device comprising: executing a predetermined processing of an input motion signal for reducing the amount of coded data when coding the motion image signal by a coding method (Hurst: column 7, lines 10-26) in which it is prescribed that the frame rate of a motion signal is set for to a constant level to be output at its decoding time (Hurst: column 7, lines 45-55: "frame pulse"), and outputs the processed motion image signal, together with the process information indicating the detail of processing; and coding the motion image signal processed at said input image controller into a data in conformity with said coding method on the basis of said process information (Hurst: column 7, lines 25-45), as in claims 22-23. However, Hurst fails to disclose using excluded fields as a part of the image coding method. Suzuki discloses the use of excluded image information (Suzuki: column 15, lines 5-15: "skipped macroblocks") in order to provide more efficient temporal and spatial scalability for coded images (Suzuki: column 10, lines 15-

43). Accordingly, given this teaching, it would have been obvious for one of ordinary skill in the art to incorporate the Suzuki use of excluded image information into the Hurst method by using the exclusion property on Hurst's disclosed interlaced processing in order to have the Hurst apparatus provide for more efficient spatial and temporal scalability with coded image signals. The Hurst method, now incorporating Suzuki's exclusion processing, has all of the features of claims 22-23.

Hurst discloses an image coding device for coding a motion image signal, and outputting the coded data as a bit stream (Hurst: figure 3), said device comprising: an input image controller which, in the case where the motion signal is of the interlaced mode (Hurst: column 1, lines 45-55), equalizes two fields (Hurst: column 7, lines 10-26) at a predetermined rate (Hurst: column 7, lines 45-55: "frame pulse"), and outputs the processed motion image signal; and an image coder for coding the motion image signal processed at said input image controller into a data in conformity with method that is designed for outputting a motion image signal at a constant frame rate (Hurst: column 7, lines 25-45; column 3, lines 50-67), as in claims 25-26. However, Hurst fails to disclose using excluded fields as a part of the image coding method. Suzuki discloses the use of excluded image information (Suzuki: column 15, lines 5-15: "skipped macroblocks") in order to provide more efficient temporal and spatial scalability for coded images (Suzuki: column 10, lines 15-43). Accordingly, given this teaching, it would have been obvious for one of ordinary skill in the art to incorporate the Suzuki use of excluded image information into the Hurst apparatus by using the exclusion property on Hurst's disclosed interlaced processing in order to have the Hurst apparatus provide for more efficient spatial and temporal scalability with

coded image signals. The Hurst apparatus, now incorporating Suzuki's exclusion processor, has all of the features of claims 25-26.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andy S. Rao whose telephone number is (571)-272-7337. The examiner can normally be reached on Monday-Friday 8 hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571)-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Andy S. Rao
Primary Examiner
Art Unit 2621

asr
June 28, 2006

ANDY RAO
PRIMARY EXAMINER